

**11<sup>th</sup> GERMPLASM & BREEDING**

**8<sup>th</sup> MOLECULAR BIOLOGY**

**ISSCT WORKSHOP**

**Saint-Gilles Réunion Island / 1–5 June 2015**



*« Pushing the frontiers of sugarcane improvement »*

**ABSTRACT**

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## **VISACANE, AN UP TO DATE CIRAD QUARANTINE TOOL FOR EXCHANGING DISEASE-FREE SUGARCANE VARIETIES IN COMPLIANCE WITH PROPERTY RIGHTS**

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Sugarcane varietal improvement requires the introduction of vegetatively propagated material. The continued increase of international and intercontinental trade of plants has led to the enforcement of quarantine measures in many countries before the import of vegetatively propagated material because many plant pathogens can be carried and transmitted by them.

Visacane, the CIRAD's sugarcane quarantine service, has been devoted to sugarcane quarantining for several decades. It covers detection and elimination of pests and pathogens and the transfer of pest and pathogen-free plant material. At the present time, Visacane detects 12 major sugarcane diseases caused by viruses and bacteria. Visacane imports and exports varieties from and to about 30 sugarcane growing countries in the world, and ensures that the material is free from any well-known important pest and disease causing agent.

Besides phytosanitary constraints, Visacane also takes into account legal constraints and ensures that plant breeders' intellectual property rights over the transferred material are respected. All the shipments of varieties are covered by a Material Transfer Agreement which specifies the conditions for use of the varieties. Breeding centers can exchange sugarcane varieties with other breeding centers or disseminate varieties through the Visacane network in compliance with their property rights.

Because it is integrated into a pathology research unit studying various aspects of plant-pathogen interactions, and thanks to its collaborations within a network of sugarcane technologists, Visacane regularly updates its expertise and provides plant material exhibiting the best possible phytosanitary quality. The last update follows the discovery of a novel sugarcane mastrevirus using a metagenomics approach (new strategy for virus identification).